Leatherback Sea Turtle (*Dermochelys coriacea*)

FAMILY: Dermochelyidae

STATUS: Endangered throughout its range (*Federal Register*, June 2, 1970).

DESCRIPTION: The leatherback is the largest, deepest diving, and most migratory and wide ranging of all sea turtles. The adult leatherback can reach 4 to 8 feet in length and 500 to 2000 pounds in weight. Its shell is composed of a mosaic of small bones covered by firm, rubbery skin with seven longitudinal ridges or keels. The skin is predominantly black with varying degrees of pale spotting; including a notable pink spot on the dorsal surface of the head in adults. A toothlike cusp is located on each side of the gray upper jaw; the lower jaw is hooked anteriorly. The paddle-like clawless limbs are black with white margins and pale spotting. Hatchlings are predominantly black with white flipper margins and keels on the carapace. Jellyfish are the main staple of its diet, but it is also known to feed on sea urchins, squid, crustaceans, tunicates, fish, blue-green algae, and floating seaweed.

HABITAT: The leatherback is the most pelagic of the sea turtles. Adult females require sandy nesting beaches backed with vegetation and sloped sufficiently so the distance to dry sand is limited. Their preferred beaches have proximity to deep water and generally rough seas.

CRITICAL HABITAT: 50 CFR 17.95 U.S. Virgin Islands – A strip of land 0.2 miles wide (from mean high tide inland) at Sandy Point Beach on the western end of the island of St. Croix beginning at the southwest cape to the south and running 1.2 miles northwest and then northeast along the western and northern shoreline, and from the southwest cape 0.7 miles east along the southern shoreline. 50 CFR 226.207 U.S. Virgin Islands – The waters adjacent to Sandy Point, St. Croix, U.S. Virgin Islands, up to and inclusive of the waters from the hundred fathom curve shoreward to the level of mean high tide with boundaries at 17° 42′12″ N. and 64° 50′00″ W. 50 CFR 226.207 California – (i) The area bounded by Point Sur (36° 18′22″ N./ 121° 54′9″ W.) then north along the shoreline following the line of extreme low water to Point Arena, California (38° 57′14″ N./ 123° 44′26″ W.) then west to 38° 57′14″ N./ 123° 56′44″ W. then south along the 200 meter isobath to 36° 18′46″ N./ 122° 4′43″ W. then east to the point of origin at Point Sur, and (ii) Nearshore area from Point Arena, California, to Point Arguello, California (34° 34′33″ N./ 120° 38′41″ W.), exclusive of Area 1 and offshore to a line connecting 38° 57′14″ N./ 124° 18′36″ W. and 34° 34′32″ N./121° 39′51″ W along the 3000 meter isobath. 50 CFR 226.207 Oregon/Washington – The area bounded by Cape Blanco, Oregon (42° 50′4″ N./ 124° 33′44″ W.) north along the shoreline following the line of extreme low water to Cape Flattery, Washington (48° 23′10″ N./ 124° 43′32″ W.) then north to the U.S./Canada boundary at 48° 29′38″ N./ 124° 43′32″ W. then west and south along the line of the U.S. Exclusive Economic Zone to 47° 57′38″ N./ 126° 22′54″ W. then south along a line approximating the 2,000 meter 112 isobath that passes through points at 47° 39′55″ N./ 126° 13′28″ W., 45° 20′16″ N. / 125° 21′ W. to 42° 49′59″ N./ 125° 8′10″ W then east to the point of origin at Cape Blanco.

REPRODUCTION AND DEVELOPMENT: In the U.S., nesting occurs from about March to July. Female leatherbacks nest an average of 5 to 7 times within a nesting season, with an observed maximum of 11 nests. The average internesting interval is about 9 to 10 days. The nests are constructed at night in clutches with an average of 80 to 85 yolked eggs. The white spherical eggs are approximately 2 inches in diameter. Typically incubation takes from 55 to 75 days, and emergence of the hatchlings occurs at night. Most leatherbacks remigrate to their nesting beaches at 2 to 3-year intervals. Leatherbacks are believed to reach sexual maturity in about 16 years.

RANGE AND POPULATION LEVEL: The leatherback turtle is distributed worldwide in tropical and temperate waters of the Atlantic, Pacific, and Indian Oceans. It is also found in small numbers as far north as British Columbia, Newfoundland, and the British Isles, and as far south as Australia, Cape of Good Hope, and Argentina. An estimated 34,500 females nested annually worldwide in 1995, a dramatic decline from the 115,000 estimated in 1980. However, recent estimates for the North Atlantic alone are a range of 34,000 to 94,000 adult leatherbacks.

Exponential declines in leatherback nesting have occurred along the Pacific coasts of Mexico and Costa Rica and in Malaysia. The Mexico leatherback nesting population, once considered to be the world's largest leatherback nesting population (65 percent of worldwide population), is now less than one percent of its estimated size in 1980. In the western Pacific, the major nesting beaches occur in Papua New Guinea, Papua-Indonesia, and the Solomon Islands, with lesser nesting reported on Vanuatu; compiled nesting data estimated approximately 5,000 to 9,200 nests annually since 1999, with 75 percent of the nests being laid in Papua-Indonesia. The most important nesting beach for leatherbacks in the eastern Atlantic lies in Gabon, Africa. It was estimated there were 30,000 nests along 60 miles of Mayumba Beach in southern Gabon during the 1999-2000 nesting season. The largest nesting population at present in the western Atlantic is in French Guiana, with nesting varying between 5,029 and 63,294 nests between 1967 and 2005. In the U.S., important leatherback nesting areas include the Atlantic coast of Florida, Sandy Point in the U.S. Virgin Islands, Puerto Rico's Islands of Culebra and Vieques, and the Fajardo and Manuabo areas on the main island of Puerto Rico.

In Florida, nesting varied between 540 and 1,747 nests per year between 2006 and 2010, with the majority of nesting occurring along the southeast Atlantic coast in Brevard through Broward Counties. In the U.S. Virgin Islands, leatherback nesting has been reported on the islands of St. Croix, St. Thomas, and St. John. However, the most significant nesting activity occurs on Sandy Point, St. Croix. Between 1982 and 2010, the number of nests recorded on Sandy Point ranged from a low of 82 in 1986 to a high of 1,008 in 2001. In Puerto Rico, the main nesting areas are at Fajardo (Northeastern Ecological Corridor) and Maunabo on the main island, and on the islands of Culebra and Vieques. Between 1993 and 2010, the number of nests recorded in the Fajardo area ranged from a low of 51 in 1995 to a high of 456 in 2009. In the Maunabo area, the number of nests recorded between 2001 and 2010 ranged from a low of 53 in 2002 to a high of 260 in 2009. On Culebra, the number of nests recorded between 1993 and 2010 ranged from a low of 41 in 1996 to a high of 395 in 1997. On Vieques beaches managed by the Commonwealth of Puerto Rico, 14 to 145 nests were recorded annually between 1991 and 2005, while the number of nests recorded on Vieques Island beaches managed by the U.S. Fish and Wildlife Service varied from 13 to 163 between 2001 and 2010.

REASONS FOR CURRENT STATUS: The crash of the Pacific leatherback population, once the world's largest population, is believed primarily to be the result of exploitation by humans for the eggs and meat, as well as incidental take in numerous commercial fisheries of the Pacific. Other factors threatening leatherbacks globally include loss or degradation of nesting habitat from coastal development; disorientation of hatchlings by beachfront lighting; nest predation by native and non-native predators; degradation of foraging habitat; marine pollution and debris; and watercraft strikes.

MANAGEMENT AND PROTECTION: It is imperative that hatchling production be maximized for the remaining leatherback nesting that occurs along the extensive Pacific coasts of Mexico, Costa Rica, and other Central American countries. Due to the long range migratory movements of sea turtles between nesting beaches and foraging areas, long-term international cooperation is absolutely essential for recovery and stability of nesting populations. In the southeastern U.S. and U.S. Caribbean, nest protection efforts and beach habitat protection are underway for most of the significant nesting areas. In addition, efforts have been undertaken to reduce leatherback mortality associated with the longline fishery. Many coastal counties and communities have developed lighting ordinances to reduce hatchling disorientations. Important U.S. nesting beaches have been and continue to be acquired for long-term protection.

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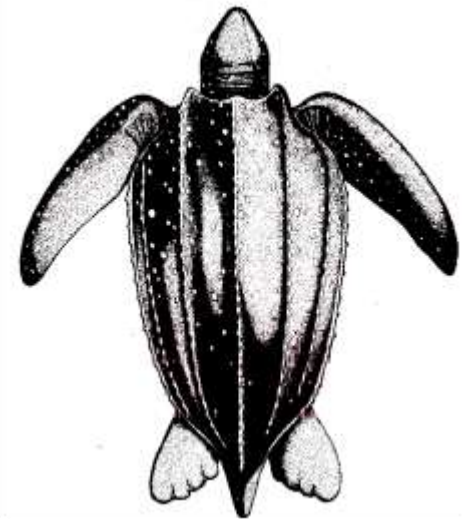

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